Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: LEE	Confirmation No.: 7479
Application Serial No.: 09/997,640	Group Art Unit: 3685
Filing Date: November 29, 2001	Examiner: Cristina O. Sherr
For: SYSTEMS AND METHODS TO FACILITATE ANALYSIS OF A COMMERCIAL MORTGAGE BACKED SECURITY PORTFOLIO BASED ON A CONTRIBUTION OF AN ADDITIONAL MORTGAGE LOAN	**APPEAL BRIEF**
	Attorney Docket No.: G04.009
	PTO Customer Number 67338 Buckley, Maschoff & Talwalkar LLC Attorneys for General Electric Company 50 Locust Avenue New Canaan, CT 06840

Mail Stop Appeal Brief – Patents (via EFS)
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellant hereby appeals to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Final Office Action mailed May 12, 2009 (the "Final Office Action"), rejecting claims 2-10, 15, 17-19, 21 and 24.

REAL PARTY IN INTEREST

The present application is assigned to GENERAL ELECTRIC CAPITAL CORPORATION, 292 Long Ridge Road, Stamford, Connecticut 06905, U.S.A.

RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are known to Appellant, Appellant's legal representative, or assignee, which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 2-19 and 21-24 are pending in this application. Claims 2-10, 15, 17-19, 21 and 24 stand rejected and are now being appealed. Claims 11-14, 16, 22 and 23 are currently withdrawn from consideration, but are dependent on claims subject to this appeal and hence would be allowable if this Honorable Board reverses the pending rejections.

Claims 1, 20, 25 and 26 have previously been canceled.

STATUS OF AMENDMENTS

No amendments were filed after the Final Office Action.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention is concerned with computerized calculations for evaluating proposals to add individual commercial mortgage loans to a portfolio of commercial mortgage loans that backs a commercial mortgage backed security (CMBS). (Specification, page 1, line 8 to page 2, line 18; page 2, line 24 to page 3, line 24.) The loans that make up the portfolio are divided into different credit rating categories such as "AAA", "AA" and "A". (Specification, page 1, lines 10-14.) Each of the credit rating categories is associated with a category size that is expressed in

percentage terms and that represents the proportion of the total assets in the portfolio which are classified in the category in question. (Specification, page 1, lines 14-18.)

In determining whether to add an additional loan to the portfolio a "loan spread" is calculated for the loan to appraise the amount of profitability that would be provided by the additional loan. (Specification, page 1, line 19 to page 2, line 6.) The present application defines "loan spread" as the difference between an interest rate paid to investors and a known index. (Specification, page 1, lines 19-23) In addition, a category size for the additional loan is also determined. (Specification, page 3, lines 8-10.)

* * * * * * *

Appellant will now map the limitations of claims 2, 4-10, 21 and 24 to the disclosure of this application, claims 2, 21 and 24 being the independent claims now pending, and claims 4-10 being dependent claims that are argued separately herein.

* * * * * * *

<u>Claim 2</u>

"A method to facilitate analysis of a commercial mortgage backed security portfolio associated with a plurality of mortgage loans"—specification, page 3, lines 1-4.

"determining base information associated with the portfolio, said determining including a server computer retrieving at least some of the base information from a database"—specification, page 3, lines 5-6; page 7, lines 20-22; page 8, lines 15-17.

"determining information associated with an additional mortgage loan to be added to the portfolio, said determining said information associated with the additional mortgage loan including the server computer receiving said information associated with the additional mortgage loan from a user terminal"—specification, page 8, lines 21-27.

"said server computer calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio"—specification, page 9, line 18 to page 10, line 11.

"the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size"—specification, page 1, lines 10-18.

"determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan"--specification, page 9, line 23 to page 10, line 7.

" said server computer calculates said loan spread in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated"—specification, page 9, lines 14-17.

Claim 4 (dependent on claim 2, also argued separately)

"adding the category size for the additional mortgage loan to the current category size to determine a combined category size for each credit rating category"—specification, page 9, lines 23-29.

Claim 5 (dependent on claim 4, also argued separately)

"determining an original profitability of the portfolio"--specification, page 9, lines 20-22.

"calculating a combined profitability of the portfolio and the additional mortgage loan based on the combined category sizes"—specification, page 10, lines 3-7.

"subtracting the original profitability from the combined profitability to determine a profitability of the additional mortgage loan"—specification, page 10, lines 3-7.

Claim 6 (dependent on claim 2, also argued separately)

"the information associated with the additional mortgage loan includes a desired profitability of the additional mortgage loan"—specification, page 10, lines 12-14.

Claim 7 (dependent on claim 6, also argued separately)

"said calculation of the loan spread is an iterative process"--specification, page 11, lines 4-17.

Claim 8 (dependent on claim 7, also argued separately)

"determining a trial loan spread for the additional mortgage loan"—specification, page 11, lines 5-6.

"computing a resulting profitability based on the trial spread"— specification, page 11, lines 6-7.

"adjusting the trial loan spread, wherein said computing and adjusting are repeated until the resulting profitability is within a predetermined range of the desired profitability"-- specification, page 11, lines 12-17.

<u>Claim 9 (dependent on claim 8, also argued separately)</u>

"said adjusting is based on a duration of the additional mortgage loan"-- specification, page 11, line 18 to page 12, line 6.

<u>Claim 10 (dependent on claim 9, also argued separately)</u>

"determining an original duration of the portfolio"-- specification, page 11, lines 19-22.

"calculating a combined duration of the portfolio and the additional mortgage loan"-- specification, page 11, lines 19-22.

"subtracting the original duration from the combined duration to determine the duration of the additional mortgage loan"--specification, page 11, lines 22-25.

<u>Claim 21 (independent)</u>

"a processor"—FIG. 9, item 910; specification, page 16, lines 7-8.

"a storage device in communication with said processor and storing instructions adapted to be executed by said processor"—FIG. 9, item 930; specification, page 16, lines 11-18.

"determine base information associated with a commercial mortgage backed security portfolio having a plurality of mortgage loans"—specification, page 3, lines 5-6; page 7, lines 20-22; page 8, lines 15-17.

"determine information associated with an additional mortgage loan to be added to the portfolio"—specification, page 8, lines 21-27.

"calculate a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio"—specification, page 9, line 18 to page 10, line 11.

"the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each

credit rating category being associated with a current category size"—specification, page 1, lines 10-18.

"determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan"--specification, page 9, line 23 to page 10, line 7.

"said loan spread is calculated in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated"—specification, page 9, lines 14-17.

Claim 24 (independent)

"A computer-readable medium storing instructions adapted to be executed by a processor to perform a method of facilitating analysis of a commercial mortgage backed security portfolio associated with a plurality of mortgage loans"—FIG. 9, item 930; specification, page 16, lines 11-19.

"determining base information associated with the portfolio"—specification, page 3, lines 5-6; page 7, lines 20-22; page 8, lines 15-17.

"determining information associated with an additional mortgage loan to be added to the portfolio"—specification, page 8, lines 21-27.

"calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio"—specification, page 9, line 18 to page 10, line 11.

"the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size"—specification, page 1, lines 10-18.

"determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan"--specification, page 9, line 23 to page 10, line 7.

"said loan spread is calculated in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated" —specification, page 9, lines 14-17.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

(1) Claims 2-10 and 17-19 are rejected under 35 U.S.C. § 101 as not being directed to statutory subject matter.

(2) Claims 2-10, 15, 17-19, 21 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Freeman et al. (U.S. Patent No. 6,249,775) in view of a printout from www.wheatworks.com relating to a "LoanSpread™ Financial Calculator"[1] and further in view of a letter authored by Charles D. Brown (hereinafter the "Brown reference")

ARGUMENT

I. ***Applicable Law***

(A) In regard to the above-noted § 101 rejection, the leading case is *In re Bilski*, 88 USPQ2d 1385 (Fed.Cir. 2008). In its aspects that are pertinent to the issues in this appeal, *Bilski* holds that a claimed process satisfies the requirements of § 101 if it is tied to another statutory class, such as a particular apparatus.

(B) Other issues in this appeal are related to rejections under 35 U.S.C. § 103(a). In these rejections, the Examiner found the claims at issue to be obvious in view of a combination of references.

The recent Supreme Court decision in *KSR Int'l Co. v. Teleflex Inc.*[2] is now the leading case on the concept of obviousness. Quoting the statute, the Court observed that a patent may not be issued when

---

[1] This website printout will hereinafter be referred to as the "Wheatworks reference".

[2] 127 S.Ct. 1729, 82 USPQ2d 1385 (2007)

> the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.[3]

A *prima facie* finding of obviousness cannot properly be made unless all the limitations of the claimed invention are taught or suggested by the prior art. *In re Royka*, 490 F. 2d 981 (CCPA 1974).

Appellants' main contentions will be that the prior art considered as a whole does not render the claimed invention obvious, and that at least one limitation of each claim is not disclosed in the prior art relied upon by the Examiner.

II. Claims 2-10 and 17-19 are directed to statutory subject matter as required under § 101.

For purposes of this rejection, it is intended that claims 2-10 and 17-19 stand or fall together.

The Examiner asserts that method steps recited in the rejected claims fail the *Bilski* test because the method steps "are not tied to a machine and can be performed without the use of a particular machine".[4] However, appellant respectfully submits that this assertion by the Examiner overlooks the following language recited in claim 2: "***a server computer*** retrieving at least some of the base information from a database"; "***the server computer*** receiving said information associated with the additional mortgage loan from a ***user terminal***"; "***said server computer*** calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio"; and "***said server computer*** calculates said loan spread in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated".

Accordingly, no less than four method steps in claim 2 are clearly tied to a machine, namely a "server computer". Indeed, one of the method steps is tied to two different machines, namely the "server computer" and a "user terminal". It thus simply is not the case that the method steps of claim 2 are not tied to a machine. Rather, several of the method steps are in fact

[3] Slip opinion, at pp. 1-2.

[4] Final Office Action, page 3, paragraph 7.

tied to a machine, so that claim 2 clearly satisfies the *Bilski* test. Thus claim 2 satisfies the statutory subject matter requirement of § 101, and this rejection should be reversed.

III. Overview of prior art references

The Freeman reference is primarily concerned with a computer-assisted technique for comparing delinquency rates among mortgage loans of different vintages.[5] An output of Freeman's technique predicts future default rates in loan portfolios and may be used to decide whether to make an investment in various loan portfolios.[6]

Inclusion of the Wheatworks reference in the Examiner's claim rejections appears to be an artifact of key word searching and inattention on the part of the Examiner. The Wheatworks reference is a webpage printout that promotes spreadsheet software for making calculations about loans. The advertised product is called "LoanSpread™ Financial Calculator" but actually has nothing to do with calculating loan spreads[7] as that term is used in the pending claims. It appears that the "spread" portion of the product name is a reference to a spreadsheet, not a loan spread.

The Brown reference is cited by the Examiner for the noncontroversial proposition that credit ratings may be conventionally expressed as letter grades.

IV. The pending claims are not obvious in view of the prior art cited by the Examiner.

Claim 2 is taken as exemplary of the pending claims.[8]

Appellant respectfully submits that the prior art relied upon by the Examiner, taken as a whole, does not teach or suggest the invention recited in claim 2, when also taken as a whole.

---

[5] Freeman, Abstract.

[6] Id.

[7] As noted above, a "loan spread" is defined in the specification of this application (at page 1, lines 19-21) as the difference in basis points between the interest rate paid to investors and a known index.

[8] Appellant proposes that the claims stand or fall together, except that appellant is also presenting separate arguments for each of dependent claims 4-10 that support patentability of those claims even if claim 2 is not held to be patentable.

The Examiner has conceded that the Freeman reference fails to disclose "calculating a loan spread for [an] additional mortgage loan in accordance with a contribution of the additional mortgage loan to [a] portfolio".[9] The Examiner then proposes that it would be "obvious … to include loan spread calculation in analyzing a portfolio of mortgages, given that loan spread calculation is a standard for evaluating mortgages."[10] In this regard, the Examiner cited the "Wheatworks" reference.

One major problem with the Examiner's position is that calculation of loan spreads has no logical part to play in Freeman's system for analyzing loan portfolios. A main point of Freeman's analysis is to determine the "performance of various loan groups vis-à-vis the default rate of these loans over the life of these loans, foreclosures, collection efforts, loan prepayments and the like".[11] Freeman proposes to improve analysis of this type of "performance" by comparing loans of different vintages as of times when the loans were at the same age.[12] However, this type of performance analysis would not be aided in any way by calculated loan spreads, because loan spreads are not relevant to this type of performance, i.e., to whether defaults occur or prepayments are made. Thus there is no apparent reason why calculating a loan spread would be incorporated in Freeman's system.

Appellant also notes that the Wheatworks reference does not support the Examiner's reliance thereon. While "LoanSpread" is the brand name for the software package advertised in the Wheatworks reference, this term merely seems to suggest the concept of a <u>spreadsheet</u> for analyzing a loan. This is a totally different concept from calculating a loan spread as that term is used in claim 2 and would be understood by one who is skilled in the art.[13] Appellant observes that the various loan parameters listed in the second paragraph of the Wheatworks reference do not include a "loan spread".

Still further, and assuming for the sake of argument that calculation of loan spreads is well known, it nevertheless does not follow that it was known to calculate a loan spread "<u>in</u>

---

[9] Final Office Action, page 5, paragraph 18.

[10] Final Office Action, page 6, lines 1-3.

[11] Freeman, column 5, lines 62-65.

[12] Freeman, column 10, lines 3-27.

[13] See footnote 7, *supra*.

accordance with a contribution of [an] additional mortgage loan to [a] portfolio", as specifically recited in claim 2. The Examiner has completely failed to establish that calculation of a loan spread in this particular manner was known in the prior art. As the Examiner concedes, Freeman is entirely silent as to loan spreads.[14] Further, the Wheatworks reference has nothing to do with calculating loan spreads. Thus the Examiner has failed to provide a *prima facie* case of obviousness with respect to at least one element of claim 2.

For all of these reasons, appellant respectfully submits that the rejection of claim 2 is fatally flawed, and should be reversed.

V. Separate argument in support of patentability of claim 4

Claim 4 is dependent on claim 2, and so should be held patentable on the same basis as claim 2. However, claim 4 also recites a limitation that supports an additional ground for patentability of claim 4.

The additional limitation recited in claim 4 is, "adding the category size for the additional mortgage loan to the current category size to determine a combined category size for each credit rating category". The Examiner asserts that the Freeman reference, at column 13, lines 11-23, discloses this limitation. However, the cited passage in the reference only deals with adjusting a comparison of groups of loans for differences in sample sizes[15]. This passage has nothing to do with adding a category size for an additional mortgage loan to a current category size to determine a combined category size.

The Examiner has failed to provide a *prima facie* case of obviousness with respect to claim 4.

[14] The Brown reference is also completely irrelevant to calculating loan spreads.

[15] Again it appears that virtually "blindfolded" key word searching is at work in the Examiner's citation of prior art.

VI. ***Separate argument in support of patentability of claim 5***

Claim 5 is dependent on claim 4, and so should be held patentable on the same bases as claims 2 and 4. However, claim 5 also recites limitations that support additional grounds for patentability of claim 5.

The additional limitations recited in claim 5 are, "determining an original profitability of the portfolio", "calculating a combined profitability of the portfolio and the additional mortgage loan based on the combined category sizes" and "subtracting the original profitability from the combined profitability to determine a profitability of the additional mortgage loan". With respect to these limitations the Examiner cited to a passage in Freeman at column 13, lines 60-65. However, this passage is not pertinent, because it relates to marginal improvements in credit quality resulting from changes in criteria. This passage does not mention profitability, and clearly does not discuss determining the profitability of a particular mortgage loan. Again, the Examiner has failed to provide a *prima facie* case of obviousness with respect to claim 5.

VII. ***Separate argument in support of patentability of claim 6***

Claim 6 is dependent on claim 2, and so should be held patentable on the same basis as claim 2. However, claim 6 also recites a limitation that supports an additional ground for patentability of claim 6.

The additional limitation recited in claim 6 is, "the information associated with the additional mortgage loan includes a desired profitability of the additional mortgage loan". As in the case of claim 5, the Examiner cites to the passage at column 13, lines 60-65 in the Freeman reference. Appellant notes again that this passage is concerned with marginal improvements in credit quality resulting from changes in criteria. The passage has nothing to do with desired profitability of a mortgage loan.

VIII. Separate argument in support of patentability of claim 7

Claim 7 is dependent on claim 6, and so should be held patentable on the same basis as claim 2 or claim 6. However, claim 7 also recites a limitation that supports an additional ground for patentability of claim 7.

The additional limitation recited in claim 7 is, "said calculation of the loan spread is an iterative process".

With respect to claim 7, the Examiner cites a passage at column 16, lines 36-45 in Freeman. However, given that Freeman does not even mention calculation of a loan spread, it follows that Freeman cannot possibly disclose such a calculation as an iterative process. In fact, the passage at column 16, lines 36-45 relates to calculating bad rate curves, not loan spreads; it also is not clear that there is anything iterative about the calculations referred to in the passage.

IX. Separate argument in support of patentability of claim 8

Claim 8 is dependent on claim 7, and so should be held patentable on the same basis as claims 2, 6 or 7. However, claim 8 also recites limitations that support additional grounds for patentability of claim 8.

The additional limitations recited in claim 8 are: "determining a trial loan spread for the additional mortgage loan", "computing a resulting profitability based on the trial spread", and "adjusting the trial loan spread, wherein said computing and adjusting are repeated until the resulting profitability is within a predetermined range of the desired profitability".

With respect to these limitations, and as was the case with other dependent claims, the Examiner has cited portions of the Freeman reference that are in fact completely irrelevant to the subject matter of the claims.[16] In the case of claim 8, the cited portions of Freeman are column 13, lines 49-59 and column 12, line 59 to column 13, line 4. These passages have nothing to do with a trial loan spread, computing profitability based on the trial loan spread, and adjusting the trial loan spread. As noted before herein (and even as conceded by the Examiner), <u>Freeman contains no teachings that are pertinent to loan spreads</u>.

---

[16] Once more it appear likely that myopic key word searching may be to blame.

Once more the Examiner has clearly failed to provide a *prima facie* case of obviousness with respect to a dependent claim.

X. ***Separate argument in support of patentability of claim 9***

Claim 9 is dependent on claim 8, and so should be held patentable on the same basis as claims 2, 6, 7 or 8. However, claim 9 also recites a limitation that supports an additional ground for patentability of claim 9.

The additional limitation recited in claim 9 is, "said adjusting is based on a duration of the additional mortgage loan". Yet again, the Examiner has cited to irrelevant portions of the Freeman reference, in this case passages at column 4, line 61 to column 5, line 5; and column 12, line 59 to column 13, line 4. These passages mention the duration of a mortgage loan, but not making an adjustment based on loan duration.

XI. ***Separate argument in support of patentability of claim 10***

Claim 10 is dependent on claim 9, and so should be held patentable on the same basis as claims 2, 6, 7, 8 or 9. However, claim 10 also recites limitations that support additional grounds for patentability of claim 10.

The additional limitations recited in claim 10 are: "determining an original duration of the portfolio", "calculating a combined duration of the portfolio and the additional mortgage loan", and "subtracting the original duration from the combined duration to determine the duration of the additional mortgage loan". Again the Examiner has cited to the passage at column 4, line 61 to column 5, line 5 in Freeman, and once again the cited passage fails to support the Examiner's reliance thereon. The brief mention in that passage of a loan start date and the date on which the loan is expected to be paid up[17] does not come close to disclosing the process details set forth in claim 10. In this case as well the Examiner has fallen short of presenting a *prima facie* case of obviousness.

---

[17] Freeman, column 4, lines 65-67.

CONCLUSION

The Examiner's claim rejections are not well founded and should therefore be reversed.

As required by 37 CFR §41.37(a)(1), this Brief is filed within two months from the date of filing of Appellant's Notice of Appeal (*i.e.*, within two months of August 26, 2009); as such, no extension of time is believed due. Also, the requisite fee for filing an Appeal Brief is submitted herewith. However, if any additional fees are due in conjunction with this matter, the Commissioner is hereby authorized to charge them to Deposit Account 50-1852. An Appendix of claims involved in this appeal is attached hereto.

If any issues remain, or if the Examiner or the Board has any further suggestions for expediting allowance of the present application, kindly contact the undersigned using the information provided below.

Respectfully submitted,

/Nathaniel Levin/

October 23, 2009
Date

Nathaniel Levin
Registration No. 34,860
Buckley, Maschoff & Talwalkar LLC
Attorneys for General Electric Company
50 Locust Avenue
New Canaan, CT 06840
(203) 972-3460

APPENDIX A--CLAIMS

1. (Canceled)

2. A method to facilitate analysis of a commercial mortgage backed security portfolio associated with a plurality of mortgage loans, comprising:

determining base information associated with the portfolio, said determining including a server computer retrieving at least some of the base information from a database;

determining information associated with an additional mortgage loan to be added to the portfolio, said determining said information associated with the additional mortgage loan including the server computer receiving said information associated with the additional mortgage loan from a user terminal; and

said server computer calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio;

wherein the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size, and wherein said calculating includes:

determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan;

wherein said server computer calculates said loan spread in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated.

3. The method of claim 2, wherein the determination of category sizes for the additional mortgage loan is based on at least one of: (i) a property type, (ii) a risk value, (iii) debt service coverage ratio information, or (iv) loan to value information.

4. The method of claim 2, further comprising:

adding the category size for the additional mortgage loan to the current category size to determine a combined category size for each credit rating category.

5. The method of claim 4, further comprising:

determining an original profitability of the portfolio;

calculating a combined profitability of the portfolio and the additional mortgage loan based on the combined category sizes; and

subtracting the original profitability from the combined profitability to determine a profitability of the additional mortgage loan.

6. The method of claim 2, wherein the information associated with the additional mortgage loan includes a desired profitability of the additional mortgage loan.

7. The method of claim 6, wherein said calculation of the loan spread is an iterative process.

8. The method of claim 7, wherein the iterative process includes:

determining a trial loan spread for the additional mortgage loan;

computing a resulting profitability based on the trial spread; and

adjusting the trial loan spread, wherein said computing and adjusting are repeated until the resulting profitability is within a predetermined range of the desired profitability.

9. The method of claim 8, wherein said adjusting is based on a duration of the additional mortgage loan.

10. The method of claim 9, wherein said adjusting comprises:

determining an original duration of the portfolio;

calculating a combined duration of the portfolio and the additional mortgage loan; and

subtracting the original duration from the combined duration to determine the duration of the additional mortgage loan.

11. (Withdrawn) The method of claim 6, wherein the method is performed for a plurality of desired profitability values to determine a plurality of loan spread values.

12. (Withdrawn) The method of claim 2, wherein said calculating is performed for a plurality of loan term periods.

13. (Withdrawn) The method of claim 2, wherein the base information includes at least one of: (i) balance information, (ii) loan rate information, (iii) loan term information, (iv) remaining term information, (v) amortization term information, (vi) servicing fee information, (vii) payment basis information, (viii) payment basis servicing fee information, or (ix) calculation of interest reserve information;

14. (Withdrawn) The method of claim 2, wherein the information associated with the additional mortgage loan includes at least one of: (i) treasury information, (ii) swap information, (iii) credit rating category spread information, (iv) credit rating category size information, (v) price cap information, (vi) coupon information, (vii) yield information, (viii) total flat bond proceed information, (ix) collateral balance information, or (x) deal duration information.

15. The method of claim 2, wherein said calculating is performed via a substantially real-time pricing application.

16. (Withdrawn) The method of claim 15, wherein said calculating is further performed utilizing a function library adapted to generate loan and/or commercial mortgage backed securities cash flows.

17. The method of claim 2, wherein the contribution of the additional mortgage is calculated via a method of subtraction process.

18. The method of claim 2, wherein the contribution of the additional mortgage loan is calculated via at least one of: (i) a weighted average contributed loan size, (ii) a duration, (iii) a

Newton's method process, (iv) a Secant method process, or (v) a root finding method for a non-linear equation.

19. The method of claim 2, further comprising:

generating, based on said calculating, individual loan pricing outputs expressed as spread values in accordance with profitability targets.

20. (Canceled)

21. An apparatus, comprising:

a processor; and

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to:

determine base information associated with a commercial mortgage backed security portfolio having a plurality of mortgage loans,

determine information associated with an additional mortgage loan to be added to the portfolio, and

calculate a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio;

wherein the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size, and wherein said calculating includes:

determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan;

wherein said loan spread is calculated in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated.

22. (Withdrawn) The apparatus of claim 21, wherein the portfolio is associated with a plurality of credit rating categories, each credit rating category being associated with a current

category size, and wherein the loan spread calculation includes determining, for the additional mortgage loan, a category size for each credit rating category, and wherein said storage device further stores at least one of: (i) a portfolio database, (ii) a market information database, or (iii) a contributory bond sizes database.

23. (Withdrawn) The apparatus of claim 22, further comprising:

a communication device coupled to said processor and adapted to communicate with at least one of: (i) a user terminal, or (ii) a real time pricing server.

24. A computer-readable medium storing instructions adapted to be executed by a processor to perform a method of facilitating analysis of a commercial mortgage backed security portfolio associated with a plurality of mortgage loans, said method comprising:

determining base information associated with the portfolio;

determining information associated with an additional mortgage loan to be added to the portfolio; and

calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio;

wherein the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size, and wherein said calculating includes:

determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan;

wherein said loan spread is calculated in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated.

25-26. (Canceled).

APPENDIX B - EVIDENCE

No evidence is being submitted with this Appeal Brief (*i.e.*, this appendix is empty).

APPENDIX C - RELATED PROCEEDINGS

No prior or pending appeals, interferences, or judicial proceedings are known to Applicants, Applicants' legal representative, or assignee, which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal. Therefore, there are no copies of decisions rendered by a court or the Board to attach (*i.e.*, this appendix is empty).